Claims

What is claimed is:

1.   A method of establishing instant messaging communication between wireless devices, said method comprising:

employing an instant messaging server to identify for a first wireless device at least one additional wireless device belonging to a same piconet as the first wireless device; and

responsive to said employing, establishing direct instant messaging communication between the first wireless device and a second wireless device, wherein the second wireless device comprises one device of the at least one additional wireless device belonging to the same piconet, and wherein the direct instant messaging between the first wireless device and the second wireless device comprises direct wireless communication therebetween.

2.   The method of claim 1, wherein the establishing comprises transitioning the first wireless device and the second wireless device from client/server based communication with the instant messaging server to wireless peer-to-peer communication without need for the instant messaging server therebetween.

3.   The method of claim 1, wherein said employing
comprises transmitting device address and access code
information of the first wireless device to the instant
messaging server to identify the piconet of the first
wireless device, and transferring from the instant messaging
server to the first wireless device available client device
address and access code information to identify said at
least one additional wireless device belonging to the same
piconet as the first wireless device.

4.   The method of claim 3, wherein said employing
further comprises identifying at the first wireless device
the second wireless device of said at least one additional
wireless device belonging to the same piconet to which
direct instant messaging communication is to be established.

5.   The method of claim 3, wherein the device address
and access code information transmitted by the first
wireless device identifies the piconet and a user of the
first wireless device, and wherein the available client
device address and access code information transferred to
the first wireless device identifies a piconet and a user of
each wireless device of the available clients.

6.   The method of claim 1, wherein said establishing
comprises employing Jabber instant messaging protocol and
the Bluetooth standard for wireless communication in making
a direct instant messaging connection between the first
wireless device and the second wireless device.

7.   An instant messaging method comprising:

    establishing connection of a first wireless client to an instant messaging server;

    sending a request from the first wireless client to the instant messaging server for identification of available wireless clients for instant messaging;

    receiving available wireless client information at the first wireless client from the instant messaging server; and

    establishing direct wireless connection between the first wireless client and a second wireless client using the available wireless client information received from the instant messaging server, wherein said direct wireless connection allows direct wireless communication between the first wireless client and the second wireless client.

8. The method of claim 7, wherein the available wireless client information comprises information allowing said first wireless client to identify at least one wireless client belonging to a same piconet as the first wireless client, and wherein said direct wireless connection comprises a direct wireless piconet connection between the first wireless client and the second wireless client, wherein the second wireless client comprises one wireless client of said at least one wireless client belonging to the same piconet.

9. The method of claim 7, wherein said establishing communication between said first wireless client and said instant messaging server comprises initializing connection to the instant messaging server through an access point (AP) interface wired to the instant messaging server, wherein said first wireless client communicates by a wireless connection with the AP interface, and wherein the instant messaging server comprises a central depository connected to a wired network.

10. A system for establishing instant messaging communication between wireless devices, said system comprising:

means for employing an instant messaging server to identify for a first wireless device at least one additional wireless device belonging to a same piconet as the first wireless device; and

means for establishing direct instant messaging communication between the first wireless device and a second wireless device, wherein the second wireless device comprises one device of the at least one additional wireless device belonging to the same piconet identified by the means for employing, and wherein the direct instant messaging communication between the first wireless device and the second wireless device comprises direct wireless communication therebetween.

11.   The system of claim 10, wherein the means for establishing comprises means for transitioning the first wireless device and the second wireless device from client/server based communication with the instant messaging server to wireless peer-to-peer communication without need for the instant messaging server therebetween.

12.   The system of claim 10, wherein said means for employing comprises means for transmitting device address and access code information of the first wireless device to the instant messaging server to identify the piconet of the first wireless device, and means for transferring from the instant messaging server to the first wireless device available client device address and access code information to identify said at least one additional wireless device belonging to the same piconet as the first wireless device.

13.   The system of claim 12, wherein said means for employing further comprises means for identifying at the first wireless device the second wireless device of said at least one additional wireless device belonging to the same piconet to which direct instant messaging communication is to be established.

14.   The system of claim 12, wherein the device address and access code information transmitted by the first wireless device identifies the piconet and a user of the first wireless device, and wherein the available client device address and access code information transferred to the first wireless device identifies a piconet and a user of each wireless device of the available clients.

15.   The system of claim 10, wherein said means for establishing comprises means for employing Jabber instant messaging protocol and the Bluetooth standard for wireless communication in making a direct instant messaging connection between the first wireless device and the second wireless device.

16. An instant messaging system comprising:

a first wireless device;

an instant messaging server capable of responding
to the first wireless device, said instant messaging
server providing identifying information to the first
wireless device on at least one additional wireless
device belonging to a same piconet as the first
wireless device; and

wherein the first wireless device is adapted to
establish direct instant messaging communication with a
second wireless device, wherein the second wireless
device comprises one device of the at least one
additional wireless device belonging to the same
piconet, and wherein the direct instant messaging
communication between the first wireless device and the
second wireless device comprises direct wireless
communication therebetween.

17. An instant messaging system comprising:

means for establishing connection of a first wireless client to an instant messaging server;

means for sending a request from the first wireless client to the instant messaging server for identification of available wireless clients for instant messaging;

means for receiving available wireless client information at the first wireless client from the instant messaging server; and

means for establishing direct wireless connection between the first wireless client and the second wireless client using the available wireless client information received from the instant messaging server, wherein said direct wireless connection allows direct wireless communication between the first wireless client and the second wireless client.

18. The system of claim 17, wherein the available wireless client information comprises information allowing said first wireless client to identify at least one wireless client belonging to a same piconet as the first wireless client, and wherein said direct wireless connection comprises a direct wireless piconet connection between the first wireless client and the second wireless client, wherein the second wireless client comprises one wireless client of said at least one wireless client belonging to the same piconet.

19. The system of claim 17, wherein said means for establishing communication between said first wireless client and said instant messaging server comprises means for initializing connection to the instant messaging server through an access point (AP) interface wired to the instant messaging server, wherein said first wireless client communicates by a wireless connection with the AP interface, and wherein the instant messaging server comprises a central depository connected to a wired network.

20. An instant messaging system comprising:

a first wireless client adapted to establish connection to an instant messaging server;

wherein the first wireless client sends a request to the instant messaging server for information on available wireless client(s) for instant messaging;

said instant messaging server forwarding available wireless client information to the first wireless client responsive to said request; and

wherein the first wireless client establishes direct wireless connection with a second wireless client using the available wireless client information received from the instant messaging server, wherein the direct wireless connection allows direct wireless communication between the first wireless client and the second wireless client.

21.   At least one program storage device readable by a machine, tangibly embodying at least one program of instructions executable by the machine to perform a method of establishing instant messaging communication between wireless devices, the method comprising:

employing an instant messaging server to identify for a first wireless device at least one additional wireless device belonging to a same piconet as the first wireless device; and

establishing direct instant messaging communication between the first wireless device and a second wireless device, wherein the second wireless device comprises one device of the at least one additional wireless device belonging to the same piconet, and wherein the direct instant messaging between the first wireless device and the second wireless device comprises direct wireless communication therebetween.

22.   The at least one program storage device of claim 21, wherein the establishing comprises transitioning the first wireless device and the second wireless device from client/server based communication with the instant messaging server to wireless peer-to-peer communication without need for the instant messaging server therebetween.

23. The at least one program storage device of claim 21, wherein said employing comprises transmitting device address and access code information of the first wireless device to the instant messaging server to identify the piconet of the first wireless device, and transferring from the instant messaging server to the first wireless device available client device address and access code information to identify said at least one additional wireless device belonging to the same piconet as the first wireless device.

24. The at least one program storage device of claim 23, wherein said employing further comprises identifying at the first wireless device the second wireless device of said at least one additional wireless device belonging to the same piconet to which direct instant messaging communication is to be established.

25. The at least one program storage device of claim 23, wherein the device address and access code information transmitted by the first wireless device identifies the piconet and a user of the first wireless device, and wherein the available client device address and access code information transferred to the first wireless device identifies a piconet and a user of each wireless device of the available clients.

26.   The at least one program storage device of claim 21, wherein said establishing comprises employing Jabber instant messaging protocol and the Bluetooth standard for wireless communication in making a direct instant messaging connection between the first wireless device and the second wireless device.

27. At least one program storage device readable by a machine, tangibly embodying at least one program of instructions executable by the machine to perform an instant messaging method, the method comprising:

establishing connection of a first wireless client to an instant messaging server;

sending a request from the first wireless client to the instant messaging server for identification of available wireless clients for instant messaging;

receiving available wireless client information at the first wireless client from the instant messaging server; and

establishing direct wireless connection between the first wireless client and a second wireless client using the available wireless client information received from the instant messaging server, wherein said direct wireless connection allows direct wireless communication between the first wireless client and the second wireless client.

28. The at least one program storage device of claim 27, wherein the available wireless client information comprises information allowing said first wireless client to identify at least one wireless client belonging to a same piconet as the first wireless client, and wherein said direct wireless connection comprises a direct wireless piconet connection between the first wireless client and the second wireless client, wherein the second wireless client comprises one wireless client of said at least one wireless client belonging to the same piconet.

29. The at least one program storage device of claim 27, wherein said establishing communication between said first wireless client and said instant messaging server comprises initializing connection to the instant messaging server through an access point (AP) interface wired to the instant messaging server, wherein said first wireless client communicates by a wireless connection with the AP interface, and wherein the instant messaging server comprises a central depository connected to a wired network.

* * * * *